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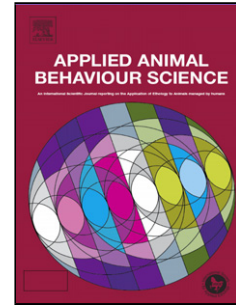
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# What do maternal tests actually test?

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## Highlights

- We investigated the maternal behaviour of 47 sows in week 2 and 4 of lactation in five successive tests in the home pen and in a test arena.
- Factor analysis extracted five factors by the Kaiser-Guttman criterion, explaining together 89.2 % of the total variance.
- The results revealed different underlying maternal factors: communication, contact, care and local attachment.
- Factor 1 explains for the largest part of variance and indicates the most important maternal factor, the reaction of sows to their piglets in threatening situations.

## ABSTRACT

Several studies have used behavioural tests to characterise sows regarding their maternal performance. These studies have always chosen a selection of behavioural tests and the combination of tests varied between the studies. In the present study, 47 sows were tested in week 2 and 4 of lactation in five successive maternal tests, which were conducted in their home pens and in a test arena. The sows' reaction to piglet stress signals, separation from and reunion with their piglets were tested. The behavioural parameters observed in these maternal tests were examined by means of a factor analysis to identify redundancies in behavioural parameters. Five factors were extracted,

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